

STATE OF TENNESSEE  
AIR POLLUTION CONTROL BOARD  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued: March 14, 2014

Permit Number:

968064P

Date Expires: March 1, 2015

Issued To:  
City of Bradford

Installation Address:  
216 E. Main Street  
Bradford

Installation Description:  
One (1) Internal Combustion  
Diesel Fuel-Fired Engine (74 hp)  
for an Emergency Generator

Emission Source Reference No.  
27-0239-01  
NSPS (Subpart IIII)  
GACT (Subpart ZZZZ)

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated December 2, 2013, and is signed by Frank Lockard, Mayor, for the permitted source. If this person terminates employment or is assigned different duties and is no longer the responsible person to represent and bind the source in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the source in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the source until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

2. New (manufactured after April 1, 2006) stationary compression ignition engines are subject to regulations under 40 CFR Part 60, Subpart IIII, **STANDARDS OF PERFORMANCE FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES** including any and/or all applicable emission limitations, notifications, compliance options, records, reports, etc. including, but not limited to, the requirements in **Conditions 3 – 11** that follow. The permittee's emergency use engine identified below shall achieve compliance with **Conditions 3 – 11** upon start-up.

Engine Make/Model	Engine Model YR	Engine Power (br-hp)
John Deere, 045TF290	2013	74

3. Nonmethane hydrocarbons plus nitrogen oxides (NMHC+NO<sub>x</sub>) emitted by this source shall not exceed 4.7 grams per KW-hour (0.57 lbs/hr). Compliance with this limit shall be indicated by compliance with **Condition 10**.

This emission limitation is established pursuant to §60.4205(b).

4. Carbon monoxide (CO) emitted by this source shall not exceed 5.0 grams per KW-hour (0.61 lbs/hr). Compliance with this limit shall be indicated by compliance with **Condition 10**.

This emission limitation is established pursuant to §60.4205(b).

5. Particulate matter (PM) emitted by this source shall not exceed 0.40 grams per KW-hour (0.05 lbs/hr). Compliance with this limit shall be indicated by compliance with **Condition 10**.

This emission limitation is established pursuant to §60.4205(b).

6. The permittee must use diesel fuel that meets the requirements of §60.4207(b) and §80.510(b). The diesel fuel used for this source is subject to the following per-gallon standards:

- (a) Sulfur content of 15 ppm maximum.
- (b) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.

The permittee shall maintain purchase receipts, vendor certifications, material safety data sheets, or other records to demonstrate that all fuel purchased for this source meets the requirements of this condition (any fuel labeled as ultra-low sulfur non-highway diesel fuel or ultra-low sulfur highway diesel fuel meets these requirements). These records shall be made available to the Technical Secretary for inspection upon request. These records must be maintained for a period of at least (2) years from the purchase date.

7. Pursuant to §60.4206, the permittee must operate and maintain the emergency stationary RICE and control device (if present) to achieve the emission standards as required in **Conditions 3 – 5** over the entire life of the engine.
8. Pursuant to §60.4211(f)(2), the emergency stationary ICE may be operated for any combination of the purposes specified in (a) through (c) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations, as specified in **Condition 9**, counts as part of the 100 hours per calendar year.
- (a) The emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Technical Secretary for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing beyond 100 hours per calendar year.

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- (b) The emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
  - (c) The emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
9. Pursuant to §60.4211(f)(3)(i), the emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing, emergency demand response, and voltage and frequency deviation, as specified in **Condition 8**. Except as provided in (a) below, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (a) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions (i) through (v) are met:
    - (i) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
    - (ii) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
    - (iii) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
    - (iv) The power is provided only to the facility itself or to support the local transmission and distribution system.
    - (v) The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee.
10. Pursuant to 40 CFR §60.4211(a) and (c), the permittee must comply by purchasing an engine certified to the emission standards in § 60.4205(b) (**Conditions 3 – 5**) for the same model year and maximum engine power. The permittee must do all of the following, except as provided in **Condition 11**:
- (a) Install and configure the engine according to the manufacturer's emission-related specifications;
  - (b) Operate and maintain the emergency stationary RICE and control device (if present) according to the manufacturer's emission-related written instructions;
  - (c) Change only those emission-related settings that are permitted by the manufacturer; and
  - (d) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply.
11. Pursuant to §60.4211(g)(1), if the stationary RICE and control device (if present) is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance by the following:
- (a) Keep a maintenance plan and records of conducted maintenance to demonstrate compliance and, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.
  - (b) Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.

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12. The emergency engine is subject to regulation under 40 CFR Part 63, Subpart ZZZZ, **NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES**. Pursuant to 40 CFR 63.6590(c), the permittee shall meet the requirements of 40 CFR Part 63, Subpart ZZZZ, by meeting the requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for the emergency engine under 40 CFR Part 63, Subpart ZZZZ.
13. The permittee must keep records of hours of operation of the engine and document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation (see example below). All data must be entered in the log no later than 7 days from the end of the day that the engine was operated. This log must be retained for a period of not less than two (2) years.

**YEARLY Log for Source 27-0239-01**

Year \_\_\_\_\_

Operation#	Dates	Classification of operation	Start time	End time	Operation time (End – Start)	Yearly total for non-emergency time	Yearly total for emergency time
#1							
#2							
#3							
Example: #1	4/20/2014	Maintenance	10:45 AM	11:15 AM	0.50 hours	16.25 hours	50.25 hours
Example: #2	5/15/2014	Readiness Testing	1:45 PM	3:00 PM	1.25 hours	17.50 hours	50.25 hours
Example: #3	8/17/2014 8/18/2014	Power Failure caused by lightning	2:45 PM	4:00 AM	13.25 hours	17.50 hours	63.50 hours

14. The stated design power output capacity for the internal combustion engine is 74 horsepower (hp). Any increase in this capacity will require a construction permit. TAPCR 1200-03-09
15. Routine maintenance, as required to maintain specified emission limits, shall be performed on the engine. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than two years.
16. This source shall comply with all applicable state and federal air pollution regulations. This includes, but is not limited to, federal regulations published under 40 CFR 63 for sources of hazardous air pollutants and 40 CFR 60, New Source Performance Standards. TAPCR 1200-03-09
17. This source shall operate in accordance with the terms of this permit and the information submitted in the approved permit application. TAPCR 1200-03-09
18. This permit shall serve as a temporary operating permit until receipt of a standard operating permit (regardless of the expiration date), provided the operating permit is applied for within the time period specified in **Condition 19** of this permit and provided the conditions of this permit and any applicable emission standards are met. TAPCR 1200-03-09
19. The permittee shall apply for an operating permit for this facility no more than thirty (30) days after initial start-up, pursuant to Tennessee Air Pollution Control Regulation 1200-03-09-.02(3).

(conditions continued on next page)



20. The permittee shall certify the start-up date of the air contaminant source regulated by this permit by submitting **A COPY OF ALL PAGES OF THIS PERMIT,** with the following information completed, to the Technical Secretary's representatives listed below:

DATE OF START-UP: \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
month day year

For the purpose of complying with this condition, "start-up" of this air contaminant source shall be the date of the setting in operation of the source for the production of electric power.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is not an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to the West Tennessee Permit Program and the Field Office at the addresses listed below, no later than thirty (30) days after the air contaminant source is started-up.

West Tennessee Permit Program  
Division of Air Pollution Control  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 15<sup>th</sup> Floor  
Nashville, TN 37243

Jackson Environmental Field Office  
Division of Air Pollution Control  
1625 Hollywood Drive  
Jackson, TN 38305

Or to [Air.Pollution.Control@tn.gov](mailto:Air.Pollution.Control@tn.gov)

Or to [APC.JackEFO@tn.gov](mailto:APC.JackEFO@tn.gov)

(End of Conditions)

## ATTACHMENT

Table 8 to Subpart III Part 60 – Applicability of General Provisions

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes	
§60.2	Definitions	Yes	Additional terms defined in §60.4219.
§60.3	Units and abbreviations	Yes	
§60.4	Address	Yes	
§60.5	Determination of construction or modification	Yes	
§60.6	Review of plans	Yes	
§60.7	Notification and Recordkeeping	Yes	Except that §60.7 only applies as specified in §60.4214(a).
§60.8	Performance tests	Yes	Except that §60.8 only applies to stationary CI ICE with a displacement of $\geq 30$ liters per cylinder and engines that are not certified.
§60.9	Availability of information	Yes	
§60.10	State Authority	Yes	
§60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart III.
§60.12	Circumvention	Yes	
§60.13	Monitoring requirements	Yes	Except that §60.13 only applies to stationary CI ICE with a displacement of $\geq 30$ liters per cylinder.
§60.14	Modification	Yes	
§60.15	Reconstruction	Yes	
§60.16	Priority list	Yes	
§60.17	Incorporations by reference	Yes	
§60.18	General control device requirements	No	
§60.19	General notification and reporting requirements	Yes	